

REMARKS

Claims 8, 10-15 and 17-20 remain pending in the present application. Claims 8, 14 and 15 have been amended and Claims 1-7, 9 and 16 have been cancelled from the present application. The basis for the above amendments may be found throughout the specification, drawings and claims as originally filed. The Examiner is respectfully requested to reconsider and withdraw his rejections in view of the above amendments and remarks as set forth below.

CLAIM OBJECTIONS

The Examiner has objected to Claim 14 based on certain informalities which do not effect the patentability of the present application. Applicant has amended the claim to correct the informalities. Therefore, Applicant respectfully traverses this rejection.

REJECTIONS UNDER 35 USC §102

Claims 1, 2, 7 and 15 stand rejected under 35 USC §102(b) as being unpatentable over U.S. Patent No. 5,745,569 (Moskowitz). Applicant respectfully traverses this rejection.

It is believed that the originally filed claims are patentably distinct over these references. Notwithstanding, Claims 1-7 have been cancelled from the present invention. Independent Claim 15 is further discussed below.

REJECTIONS UNDER 35 USC §103

Claims 9-11 stand rejected under 35 USC §103(a) as being unpatentable over Moskowitz in view of U.S. Patent No. 6,047,374 (Barton) and in further view of U.S. Patent Nos. 5,949, 885 (Leighton) and 6,311,214 (Rhoads). Applicant respectfully traverses this rejection.

Moskowitz is directed to a method for copy protection of computer software. Although Moskowitz generally discusses embedding an encoded code resource and a decode key into a non-executable digital sample, this reference does not teach or suggest specific techniques for embedding these two types of data. Specifically, Moskowitz does not teach or suggest embedding active hidden data orthogonal to control data as recited in Applicant's claimed invention.

The Examiner relies on Leighton to teach or suggest embedding two types of data orthogonal to each other with the host data. Applicant asserts that Leighton fails to provide such a teaching. Figure 1 of Leighton discloses the preferred method for inserting a digital watermark into a digital medium. Applicant notes that the derived baseline watermark vector at step 12 and the watermark offset vector at step 16 are combined to generate a single modified watermark vector. A single modified watermark vector is then inserted at step 22 into the digital medium. In other words, Leighton only teaches inserting one type of data into the digital medium. The specific teaching referenced by the Examiner merely discusses selecting the watermark offset vector to be orthogonal to the baseline watermark vector. Thus, Leighton does not teach or suggest how two types of data may be embedded in the digital medium. Moreover, Leighton does not teach or

suggest embedding active hidden data orthogonal to control data as recited in Applicant's claimed invention.

In contrast, Applicant's invention is directed generally to an improved technique for robustly hiding active data into a host data stream. Of interest, Claim 8 recites "embedding the active hidden data and the control data into a host data stream to form an embedded data stream, the active hidden data being embedded orthogonal to the control data in the embedded data stream" in combination with the other elements recited in the claim. Embedding data into different layers within the host data signal avoids any interference between embedded bits, thereby ensuring extractability of each layer. Applicant also notes that none of the other relied upon references teach or suggest embedding active hidden data orthogonal to control data as recited in Applicant's claimed invention. Therefore, it is respectfully submitted that Claim 8, along with claims depending therefrom, defines patentable subject matter over the relied upon references.

Applicant notes that independent Claim 15 recites similar claim limitations, and thus should be allowable, along with claims depending therefrom, for the same reasons as Claim 8. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection.

CONCLUSION

All of the stated grounds for rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that

the Examiner reconsider all presently outstanding rejections and further requests that they be withdrawn. Accordingly, it is believed that a full and complete response has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes that personal communication will expedite prosecution of this application, he is invited to telephone the undersigned at (248) 641-1230.

Prompt and favorable consideration of this response is respectfully requested.

Respectfully submitted,

Dated: September 18, 2002

Harness, Dickey & Pierce, P.L.C.
P.O. Box 828
Bloomfield Hills, MI 48303
(248) 641-1600

TDM/mas

By: 

Timothy D. MacIntyre
Reg. No. 42,824
Attorneys for Applicant

ATTACHMENT FOR CLAIM AMENDMENTS

The following is a marked up version of each amended claim in which underlines indicates insertions and brackets indicate deletions.

8. (Amended) A method for distributing active hidden data in an electronic media distribution system, the media distribution device having a content providing device and at least one player device, comprising the steps of:

providing active hidden data and control data, wherein the active hidden data comprises a set of executable machine instructions and the control data governs the use of the active hidden data;

embedding the active hidden data and the control data into a host data stream[, thereby forming] to form an embedded data stream, the active hidden data being embedded orthogonal to the control data in the embedded data stream;

transferring the embedded data stream from the content providing device to the player device;

extracting the active hidden data from the embedded data stream on the player device;

using the control data to ensure the errorless extractability of the active hidden data from the embedded data stream; and

executing the active hidden data on the player device when the active hidden data is extracted without error from the embedded data stream.

14. (Amended) The method of Claim 8 further comprising the steps of encrypting the active hidden data prior to embedding the active hidden data into the host data signal and decrypting [decryting] the active hidden data prior to executing the active hidden data on the player device.

15. (Amended) An electronic media distribution system for distributing active hidden data in a host data stream, the media distribution device having a content providing device and at least one player device, the content provider device comprising:

a bit stream generator receiving active hidden data and converting the active hidden data into an active bit stream, wherein the active hidden data comprises a set of executable machine instructions;

a first encoder receiving the active bit stream and the host data stream and embedding the active bit stream into the host data stream, thereby forming an embedded data stream; and

a second encoder receiving control data and the embedded data stream and embedding the control data into the embedded data stream, wherein the control data is used to govern the use of the active hidden data and the control data is orthogonal to the active bit stream in the embedded data stream.